

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A frequency regulating circuit for the current-consumption-dependent clock supply of a circuit configuration, comprising:

a current measuring device for measuring an instantaneous current consumption of the circuit configuration;

means for comparing the instantaneous current measured by said current measuring device with a definable threshold value;

a controllable clock supply circuit having:

an output to be connected to a clock input of the circuit configuration; and

a clock generator generating a clock signal with clock pulses at said output; and

a control device connected to said clock supply circuit and driving said clock supply circuit based upon the measured current consumption, said control device controlling said

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clock supply circuit to filter out individual clock pulses of said clock signal and reduce a clock frequency at said output of said clock supply circuit when said means for comparing determine that the instantaneous current consumption exceeds the definable threshold value; and

said control device adjusting said clock frequency to provide at said output, at any time, the maximum possible clock frequency corresponding to a maximum permissible current consumption of the circuit.

Claim 2 (canceled)

Claim 3 (previously presented): The frequency regulating circuit according to claim 1, wherein said means for comparing further comprise a comparator comparing the current measured by the current measuring device with the definable threshold value.

Claim 4 (currently amended): A frequency regulating circuit for the current-consumption-dependent clock supply of a circuit configuration, comprising:

a current measuring device for measuring an instantaneous current consumption of the circuit configuration;

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means for comparing the instantaneous current measured by said current measuring device with a definable threshold value;  
a controllable clock supply circuit having:

an output to be connected to a clock input of the circuit configuration; and

a clock generator generating a clock signal with clock pulses at said output; and

a control device connected to said clock supply circuit and driving said clock supply circuit based upon the measured current consumption, said control device programmed to control said clock supply circuit by filtering out individual clock pulses of said clock signal to reduce a clock frequency at said output of said clock supply circuit when said means for comparing determines that the instantaneous current consumption exceeds the definable threshold value; and

said control device adjusting said clock frequency to provide at said output, at any time, the maximum possible clock frequency corresponding to a maximum permissible current consumption of the circuit.

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Claim 5 (canceled):

Claim 6 (previously presented): The frequency regulating circuit according to claim 4, wherein said means for comparing comprise a comparator comparing the current measured by the current measuring device with a definable threshold value.

Claim 7 (currently amended): A frequency regulating circuit for the current-consumption-dependent clock supply of a circuit configuration, comprising:

a current measuring device for measuring an instantaneous current consumption of the circuit configuration;

means for comparing the instantaneous current measured by said current measuring device with a definable threshold value;

a controllable clock supply circuit having:

an output to be connected to a clock input of the circuit configuration; and

a clock generator generating a clock signal with clock pulses at said output; and

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a control device connected to said clock supply circuit and driving said clock supply circuit based upon the measured current consumption, said control device programmed to filter out individual clock pulses of said clock signal for reducing a clock frequency at said output of said clock supply circuit when said means for comparing determine that the instantaneous current consumption exceeds the definable threshold value; and

said control device adjusting said clock frequency to provide at said output, at any time, the maximum possible clock frequency corresponding to a maximum permissible current consumption of the circuit.

Claim 8 (canceled)

Claim 9 (previously presented): The frequency regulating circuit according to claim 7, wherein said means for comparing comprise a comparator comparing the current measured by the current measuring device with a definable threshold value.